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(57) An educational kit which uses the Montessori apoproach to education, the educational kit comprising (a) professionally produced words, pictures and objects of a quality and a range of subject matter that is not normally attainable by Montessori teachers and teacher training students, and (b) instructions for use, whereby the educational kit is adapted to be used in homes and schools without the need to produce hand made material.

⁽⁵⁴⁾ An educational kit

peg tap pig gun rug bag hen bin box pen hat cap cat van bus dog mug pin lid pot pan cup rag mat ram bat tug sac leg kid ink log tub web rat bed jug net nut man wig fan jam cot

IYPICAL EXAMPLES OF 3-LETTER PHONETICS AS USED ON PINK CARDS.

戸の一

lag cotton clip silk stag frog blot belt helmet

TYPICAL EXAMPLES OF 4-LETTER OR LONGER PHONETICS AS USED ON BLUE CARDS.

FIG2

GREEN FOLDER SHOWING DIGRAPHS

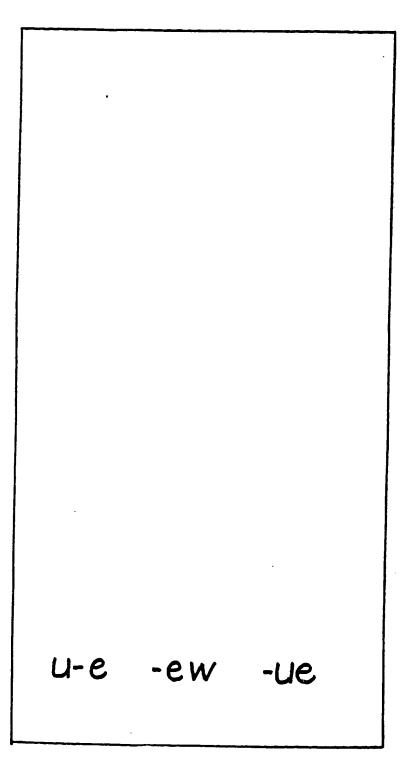


FIG 3a

TYPICAL EXAMPLES OF THE DIGRAPH "ue"

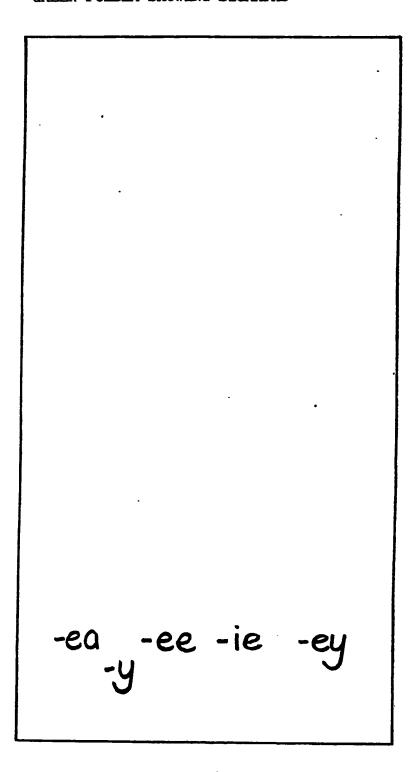
clue blue hue due value issue continue rescue

TYPICAL EXAMPLES OF THE DIGRAPH "ue"

tube brute muse dispute use rude amuse flute

FIG 3c

GREEN FOLDER SHOWING DIGRAPHS



F194a

TYPICAL EXAMPLES OF DIGRAPH "ea"

pea scream weak stream seal leak beam feast

FIG 4b

TYPICAL EXAMPLES OF DIGRAPH "ie"

field yield priest brief friend grief pier tier

TYPICAL EXAMPLES OF DIGRAPH "ey'

abbey alley valley hockey donkey jockey cockney key

FIG 4d

TYPICAL EXAMPLES OF DIGRAPH "ee"

feet bleed need coffee creep sweep reed free

F19 4e

GREEN CARD SHOWING DIGRAPH "le"

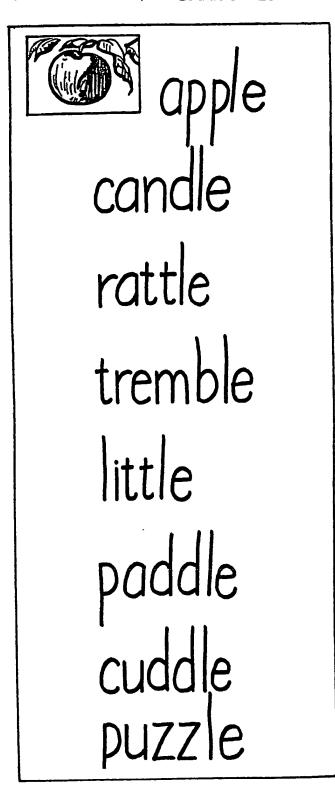


FIG5

A GREEN SENTENCE CARD SHOWING THE USE OF THE DIGRAPH "er"

he otter never got any fatter

FIG6

A GREEN SENTENCE CARD SHOWING THE USE OF THE DIGRAPH "Ing"

In the spring I go running and skipping.

F1G7

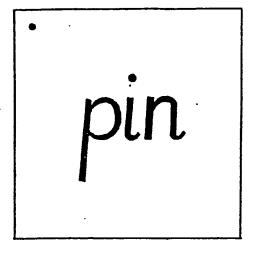
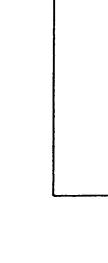


FIG 8



F1410

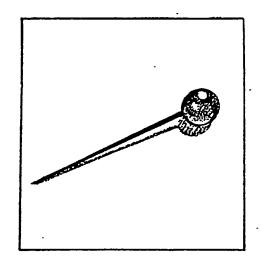


FIG 9

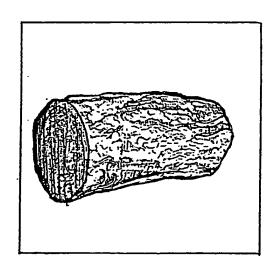


FIG II



FI & 12

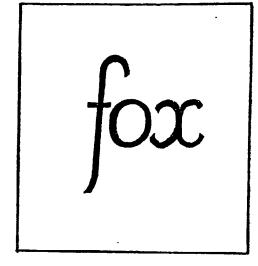
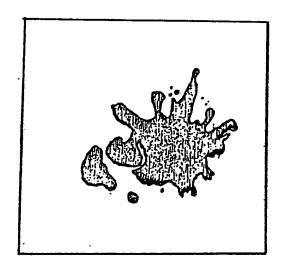
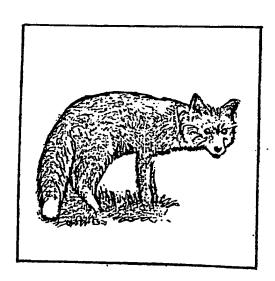


FIG H



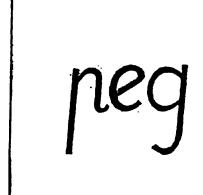
F14 13



F14 15



F16 16



F16 18

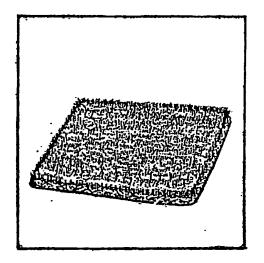
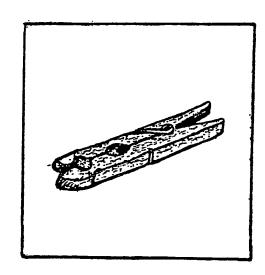
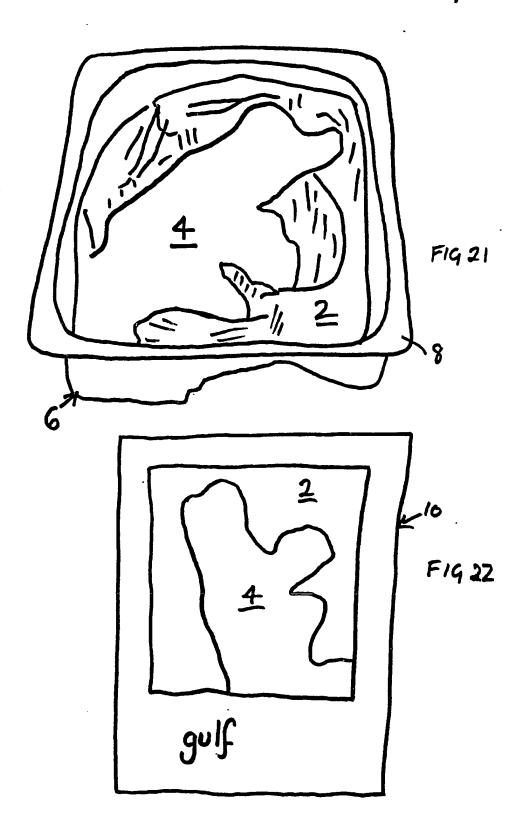


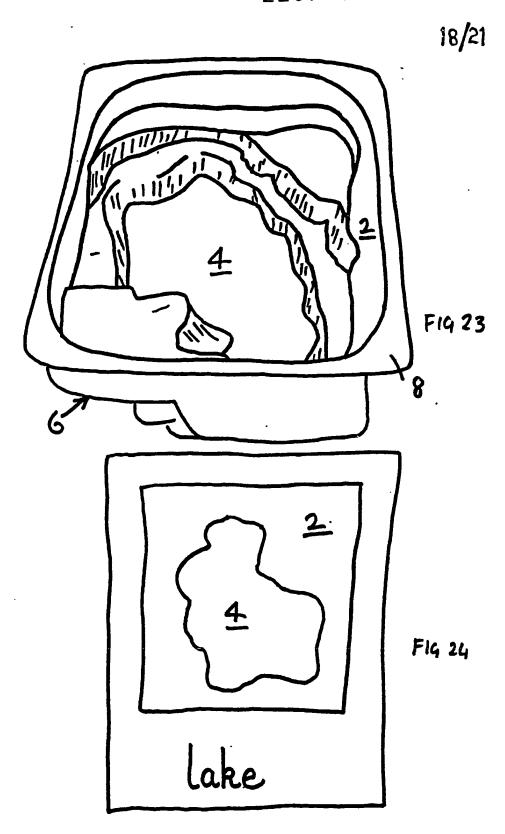
FIG 17

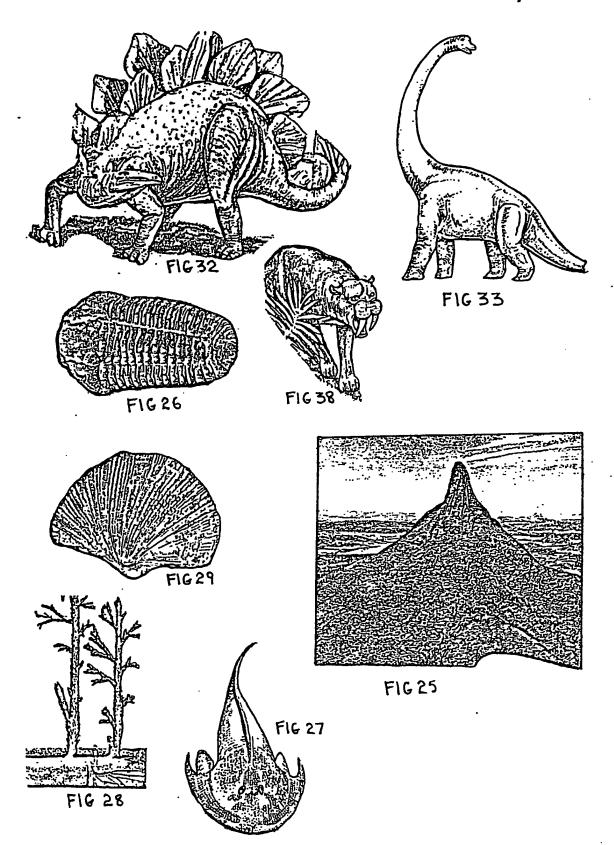


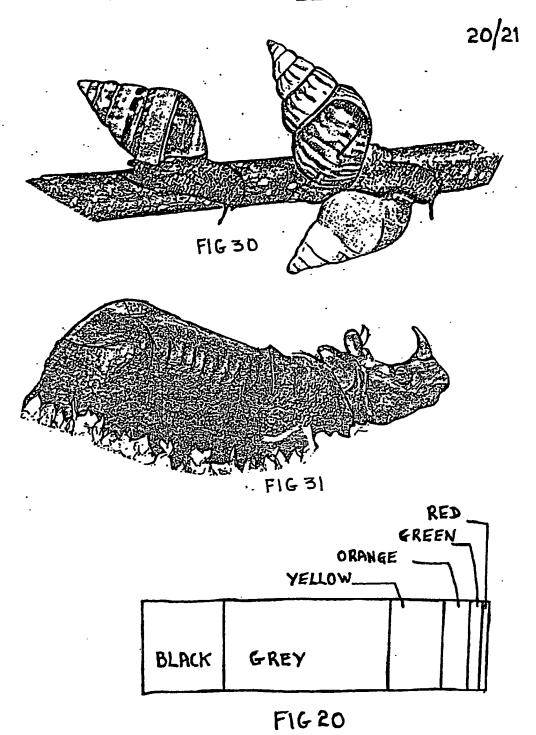
F1619

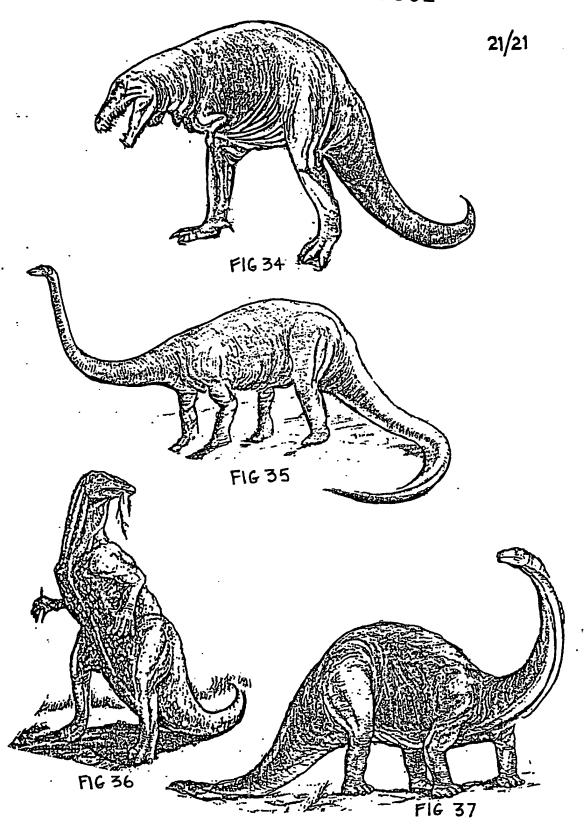
17/21











AN EDUCATIONAL KIT

This invention relates to an educational kit.

The Montessori approach to education is well

known. There are a large number of Montessori schools

located throughout the world which use the Montessori

approach to education to teach children from approximately

2½ years old. The children can be educated using the

Montessori approach up to approximately the age of eighteen.

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The Montessori approach to education is based on the recognition that children absorb from the environment through activity and their senses. The Montessori approach to education requires teachers and teacher training students to provide certain material which is for use in the schools and which is hand made by the teachers and the teacher training students. The production of this hand made material is time consuming and it only enables the provision of a very limited range of subject matter.

It is an aim of the present invention to overcome this problem.

Accordingly, this invention provides an educational kit which uses the Montessori approach to education, the educational kit comprising (a) professionally produced words, pictures and objects of a quality and a range of subject matter that is not normally attainable by Montessori teachers and teacher training students, and (b) instructions for use,

whereby the educational kit is adapted to be used in homes and schools without the need to produce hand made material.

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The use of the professionally produced words, pictures and objects enables the educational kit to have a broad spectrum of subject matter. The services of qualified people are employed to construct the required material for photographing to produce the required wide range of pictures. The use of professional printing techniques gives the entire educational kit a uniformity and consistency that is required in the Montessori approach. Because Montessori teachers and teacher training students do not have to produce hand made material, they are saved many hours of labour. In addition, the educational kit of the present invention enables the Montessori approach to be used by parents in their homes. Previously, parents have been denied the facility to use the Montessori approach to education in their homes and this represented an unsatisfactory state of affairs, especially when many Montessori schools have an extended waiting list of the order of four years which means that parents cannot easily get their children into Montessori schools.

The educational kit of the present invention may be used for language education.

The educational kit may include send paper cards for use in the initial stages of teaching a child to read and write.

The educational kit may include an alphabet which is in the same form of print and which is composed of individual letters which can be taken by a child and used in word building.

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The educational kit may include a plurality of pink boxes.

Preferably, there are five pink boxes, the first box containing words and objects, the second box containing words and pictures, the third box containing words and objects, the fourth box containing words and pictures, and the fifth box containing a plurality of pieces of inset folded paper, the words being three letter phonetics. The words are thus spelt as they are pronounced.

If desired, there may be more of the pink boxes so that, for example, six or eight of the pink boxes may be employed in the educational kit. Preferably, twelve pieces of the inset folded paper are employed.

The educational kit may also include two pink cards, each card having a pink envelope on its rear surface, and each card having a plurality of pictures mounted on its front surface, and the words for the pictures being provided in the envelopes.

Preferably, the pink cards are 10 inches by 8 inches in size. Other sized cards may however be employed.

The educational kit may also include a pink sentence which contains a plurality of sentence cards, a plurality of objects and a plurality of pictures. The pink sentence is preferably 6 inches by 3.5 inches but other sized apparatus may be used.

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The educational kit may include a plurality of pieces of apparatus which are coloured blue and which are similar to the pieces of the pink apparatus, with the proviso that the blue words are composed of four or longer letter phonetics.

The pink and the blue words are preferably half inch words centered on card which is $2\frac{1}{2}$ inches by $2\frac{1}{2}$ inches.

The educational kit may include a plurality of green boxes, each box being labelled in its top right hand corner with a particular digraph which is in a different colour to the remainder of the word in which the digraph appears. The digraph may be regarded as a two letter combination giving one sound. Thus typical examples of digraphs are sh, ie, ee and oo.

Any desired and appropriate number of the green boxes may be employed. Thus, for example, there may be ten of the green boxes.

The educational kit may include an auxiliary green box containing pictures of some things animate and some things inanimate, and also containing appropriate word cards.

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The educational kit may include sentence cards in green making one sentence for each box.

The educational kit may further include green booklets which have a digraph written on the corner, and one word on each page with the digraph in the word identified in a different colour to the remainder of the word. Thus, for example, one of the green booklets may have the digraph "sh" written in the corner, the word "fish" on the first page, the word "ship" on the second page, and so on.

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When the digraph is used, it will normally always be picked out in a different colour for ease of identification.

The educational kit may include two word lists, the first of the words listed having a corresponding picture.

The educational kit may include two folders with different ways of spelling a different sound.

The educational kit may include phonogram boxes.

The educational kit may include a black card which has pictures of phonetic names of objects, and word

cards which each contain the name of a picture on the black card.

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Preferably, the word cards are $2\frac{1}{2}$ inches by $2\frac{1}{2}$ inches. The educational kit may be in the form of game apparatus. One or more types of game apparatus may be employed.

First game apparatus may comprise phonetic word cards with each card having a picture on one side representing a word on the other side of the card. The card may have a marking for indicating the correct way up for the card. marking may be a dot in the left hand corner of the card. the cards in the phonetic word cards, may have vowels highlighted in a different colour to the remainder of the letters in the words. There may be five separate cards giving the vowels A E I O U. A child may read one of the phonetic cards and place it under the correct vowel card, the correction of error (after all the cards have been placed down) being the picture on the other side. The card can also be used with a large movable alphabet so that the child sees only the picture side whilst he or she builds the words, and has the correction of error when he or she turns the card over to see the printed word corresponding to his or her own word.

Second game apparatus may comprise a plurality of cards, each with a phonetic word on one side and a picture on the

other side. Some of the words will contain the letter X and other words will not contain the letter X. One card has only X on it and it is a header card under which the child places all the pictures he or she believes will be spelt with a letter X because they have the sound. The child's correction of error is when the child turns the cards up and sees the printed word, and whether or not the printed word contains or does not contain the letter X.

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Third game apparatus may comprise printed word cards with a first character highlighted in another colour, and a picture on the other side of the cards. This game apparatus may be used for playing a sound game for consonants. Every consonant in the alphabet may be used so that the child has practise in learning the consonants (except X) with the correction of error being effected by turning the cards over.

The cards used in the first game apparatus may be yellow, the cards used in the second game apparatus may be grey, and the cards used in the third game apparatus may be lilac.

Other colours may be employed if desired.

The educational kit of the present invention may also be employed to teach grace and courtesy.

A grace and courtesy educational kit may contain four mats in a pack together with a dinner knife and fork. All cutlery and dinnerware may be made of a magnetic material and packed in sets of four, for example four bowls in one pack,

four dinner plates in another pack, four sundae dishes in another pack, and four dessert forks and spoons in another pack. This enables one of the mats to be made up for a specified table setting and a child can then use that as a guide to make up the other three table settings. If desired, the educational kit may include a sheet of paper with an outline of a knife and fork, and the educational kit may further include all other cutlery mounted on one or more pieces of substrate material such that they can be removed from the substrate material and stuck on the sheet of paper as required.

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The educational kit may include a story book with an audio recording. The audio recording is preferably a tape recording.

The educational kit may also include videos for teachers, lecturers and students showing acceptable methods of presenting all the Montessori didactic material to children, together with appropriate tapes.

The educational kit may include finger muppets and cut out characters from the story book, the educational kit further including a frame for a child to apply the cut out characters.

The educational kit may also be employed to teach history and geography.

The educational kit may thus include a time line depicting different stages of evolution. Pictures employed in the educational kit when it is used to teach history and geography may show flora and fauna.

The educational kit may include pictures of all aspects of life in various geographical and historical situations.

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The educational kit may be in the form of a history time line. The kit may thus be a pack containing material which may be made of felt or a vinyl plastics material, cut into lengths and joined. Each length will represent to scale periods of time, with each period being represented by a conferent colour. Thus, for example, the length of material may be composed of three metres of black material, seven metres of grey material, 1.5 metres of yellow material, 0.43 metres of orange material, 0.15 metres of green material, and 0.01 metres of red material. The colours preferably cccur in this stated order but other orders and other colours may be employed if desired.

The history time line educational kit may contain colour coded cards (matching the colours of the material) on which the story of that period or era is told. The kit may contain labels or naming cards for each era and picture cards which will be varied showing happenings of that time.

The history time line educational kit may include three

dimensional sculptured objects depicting the evolution of life on earth from the beginning of time as we know it.

Examples of objects may be the following.

- 1. Volcanos with simulated eruptions.
- 5 2. Cratered earth.
 - 3. Rhynia.
 - 4. Trilobites.
 - 5. Crinopods.
 - 6. Brachiopods.
- 10 7. Smilidon.
 - 8. Dichobune.
 - 9. Dimetrodon.
 - 10. Adapis.
 - 11. Elasmosaurus.
- 15 12. Stegosarus.
 - 13. Pterenopods.
 - 14. Tyrannosaurus.
 - 15. Archaeopteryx.
 - 16. Plesiosaurus.
- 20 17. Elasmosauraus.
 - 18. Triceratops.
 - 19. Cephalaspia (jawless fish).
 - 20. Asteroxylon.
 - 21. Other Dinosaurs.

The use of the time line strip of material in felt or vinyl using the specially sculptured realistic objects provides a very useful educational kit. If desired, the various dinosaurs can be omitted.

The educational kit may also include a geographical educational kit. There may be three geographical educational kits.

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A first geographical educational kit may be an elementary kit which comprises eight realistic three dimensional sculptured landforms. The landforms may be packed with complementary maps, labels and definition cards. The landforms may be printed in two colours or they may be left unpainted for a teacher to paint. Pictures may also be included in the pack which may show regional examples of appropriate global sites of each of the landforms.

A second geographical educational kit may be a primary geographical kit. The kit may contain the same apparatus as the elementary geographical kit, except that the landforms may be multi-coloured landscapes, and advanced teaching suggestions may be included, pertaining to the differences in each, for example vegetation, sociological, geological, historical, geographical, etc.

A third geographical educational kit may include landforms and advanced teaching aids for advanced landforms such for example as deltas, estuaries and the like. The educational kit may include an atlas which is colour coded.

The pictures may be mounted on colour coded card to agree with coloured areas on the atlas.

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The educational kit may include objects, words and pictures of land forms, for example a peninsular, an isthmus, a strait or a lake.

The educational kit may also be employed to teach natural history.

The educational kit may thus include words, pictures and objects of vertibrates and invertibrates.

Where the educational kit is used to teach children of normal learning capability, then wording employed in the educational kit will normally be printed in a cursive style. Where the educational kit is used to teach dislexic children, then wording employed in the educational kit may be printed in a cursive style with base line run-up strokes.

Embodiments of the invention will now be described solely by way of example and with reference to the accompanying drawings in which:

Figure 1 snows typical examples of three letter phonetics as used on pink cards;

Figure 2 shows typical examples of four letter or longer phonetics as used on blue cards;

Figure 3a shows the front of a green folder showing digraphs;

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Figures 3b and 3c show typical examples of the use of a digraph;

Figure 4a shows the front of a green folder showing digraphs;

Figures 4b, 4c, 4d and 4e show the use of digraphs;

Figure 5 shows a green card with words illustrating the use of a digraph;

Figures 6 and 7 show two green cards;

Figures 8 and 9 show both sides of a card used in an educational kit in the form of first game apparatus;

Figures 10 and 11 show the two sides of another card used in the first game apparatus;

Figures 12 and 13 show both sides of a card used in an educational kit in the form of second game apparatus;

Figures 14 and 15 show both sides of another card used in the second game apparatus;

Figures 16 and 17 show both sides of a card

employed in an educational kit in the form of third game apparatus;

Figures 18 and 19 show both sides of another card used in the third game apparatus;

Figure 20 shows an example of history timeline sheet material;

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Figure 21 is a perspective view of a geographical landform which may be used in an elementary geographical educational kit;

Figure 22 is a plan view of a picture that may be sed with the landform shown in Figure 21 as part of the geographical educational kit;

Figure 23 shows an alternative landform to that shown in Figure 21;

Figure 24 shows an alternative picture to that shown in Figure 22;

Figure 25 shows a sculptured object in the form of a volcano;

Figure 26 shows a sculptured object in the form of a trilobite; and

Figures 27 to 38 show other sculptured objects.

Referring now to Figure 1, there are shown typical examples of three letter phonetics as used on pink cards which are employed in an educational kit to teach language,

that is to teach children to read and write. It will be seen that all the illustrated letters are spelt as they are pronounced.

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Referring now to Figures 3a-3c, there are shown examples of four letter or longer phonetics as used on blue cards. Again it will be noted that all the illustrated words are spelt as they are pronounced. More specifically, from Figures 3a - 3c, it will be seen that Figure 3a illustrates the front of a green folder showing the diagraphs u-e, - ew and - ue. Figures 3b and 3c show typical examples of words with the digraph ue.

Referring now to Figures 4a to 4e, there is shown in Figure 4a the front of a green folder showing the digraphs - ea, - ee, - ie, - ey and - y. Figures 4b, 4c, 4d and 4e show typical examples of the digraphs ea, ie, ey and ee respectively.

There is shown in Figure 5 a green card showing the use of the digraph le. It will be noted that the digraph le is emphasized in the illustrated words by being of a different colour.

Figure 6 illustrates a green sentence card showing the use of the digraph er. The digraph er will be emphasized by being in a different colour to the remainder of the words in which it occurs.

Figure 7 illustrates another green sentence card showing the use of the digraph ing. Again, the digraph ing will be emphasized in the green sentence card by being of a different colour to the remainder of the words in which it appears.

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Figure 8 and 9 show two faces of a card which may be used in first game apparatus. The card has a dot as shown in the top left hand corner to show the right way up of the card. The vowel in the word "pin", that is the letter "i", is highlighted in a different colour. The object shown in Figure 9 is that spelt out by the word shown in Figure 8.

Figures 10 and 11 show another card which may be

used in the first game apparatus, the card face shown in Figure 10 having the word log spelt on it and the card face shown in Figure 11 having a picture of a log. In the word log as spelt, the vowel "o" is highlighted in a different colour from the colour of the remainder of the letters in the word.

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Figures 12 and 13 show both faces of a card which may be used in a group of cards in second game apparatus. As shown in Figure 12, one face of the card shows the word blot whilst the other face of the card as shown in Figure 13 shows an actual blot.

Figures 14 and 15 show a second example of a card which may be used in the second game apparatus. In Figure 14, the word fox is shown whilst a picture of a fox is shown in Figure 15. The word fox contains an X and cards such as the cards shown in Figures 14 and 15 can be used to give a child practice in letters spelt with an X.

Figures 16 and 17 and Figures 18 and 19 show two examples of cards which may be used in third game apparatus. As can be seen from Figures 16 and 18, the first letter is picked out in another colour from the remainder of the letters in the words. The cards shown in Figures 16 to 19 may also be used in a sound game for consolents.

Figure 20 shows a history timeline. The history

timeline shown in Figure 20 may be made of felt or a vinyl plastics material. As can be seen from Figure 20, the history timeline is divided into different coloured sections which are coloured as shown. Preferably, the black section is three metres long, the grey section is seven metres long, the yellow section is 1.5 metres long, the orange section is 0.43 metres long, the green section is 0.15 metres long, and the red section is 0.01 metres long. The colours may represent different eras. A scale may be employed of, for example, five million years to one inch.

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In Figure 21, there is shown part of a geographical kit which is painted in two colours with land 2 being of one colour and water 4 being of another colour. The sculptured landform is in the form of a tray 6 having a flange 8. The sculptured landform shown in Figure 21 is that of a gulf. Figure 22 shows a map 10 of a gulf as shown. The gulf shown in Figure 22 has land 2 and water 4.

Figure 23 shows a tray 6 which is similar to
Figure 21 and similar parts have been given the same
reference numerals for ease of comparison and ease of
understanding. The land 2 is again of one colour whilst
the water 4 is again of another colour. The water 4
shown in Figure 23 is that of a lake.

Figure 24 shows a map 10 showing a lake.

Referring now to Figures 25 to 38, there are shown three dimensional sculptured objects depicting the evolution of life on earth from the beginning of time as we know it. Thus, more specifically, Figure 25 shows a volcano, Figure 26 shows a trilobite, Figure 27 shows a fish, Figure 28 shows a treeform or a plantform, Figure 29 shows a shell, Figure 30 shows snails, Figure 31 shows a rhinoceros, and Figures 32 to 38 show various types of pre-historic animals, which are mostly various types of dinosaurs.

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It is to be appreciated that the embodiments of the invention described above with reference to the

accompanying drawings have been given by way of example only and that modifications may be effected. Thus, for example, the illustrated pink, blue and green pieces of apparatus may be mainly used in the teaching of language. If the educational kit is to require to teach grace and courtesy, then it may include a sheet of paper with an outline of a knife and fork, together with other cutlery in self adhesive form for sticking to the sheet of paper as required. For the teaching of grace and courtesy, a story book, a tape recording, finger muppets, cut out characters from the story book, and a frame may be employed. For using the educational kit to teach history and geography, then a time line, and pictures of all aspects of life in various geographical and historical situations may be employed. The educational kit when used for teaching history and geography may also include an atlas which is colour coded together with colour coded pictures and objects, words and pictures of land forms.

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For teaching natural history, the educational kit may include words, pictures and objects of vertibrates and invertibrates. The frame may be a felt frame or made of other material and the educational kit may include a box with jigsaw-type cut up pictures for forming puzzles. The instructions for use will preferably be very detailed and

explicit so that an adult will be able to easily understand how the educational kit is to be used prior to teaching one or more children.

The educational kit of the present invention preferably advantageously employs the same type of graphic style of writing and/or printing throughout. This type of graphic style of writing and/or printing is preferably an upright italic cursive style. The educational kit may enable precision, order and appeal to the sense organs of children being taught. The kit may enable this to be achieved through precision of mounting and colour coding, the typographic style, and the size and spacing of borders. The instructions for use may contain advice on the environment and its preparation. The instructions will also usually describe in detail the correct usage of the material provided in the educational kit.

The professionally produced material such as the words, pictures and objects may be regarded as being created by up to date technology, or not done by hand. This method of creation of the words and/or pictures and/or objects gives an appearance which is consistent and which thus provides a considerable advantage over any material that could be made by hand. Teachers can thus teach children to a consistent standard. Similarly, the use of the professional printing techniques may be such as to give a consistent appearance and in a particular and novel style of printing.

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The dinosaurs may be omitted if desired from the timeline.

The cards in the pink and blue packs may have pictures, words and objects.

A book may be included to make a total reading and writing scheme.

With different colours, black may indicate nouns.

In the geographical kits, more or less than eight of the landforms may be employed.

The present invention also extends to the various described and/or illustrated pieces of apparatus and/or features, taken separately or in any combination, irrespective of what is set out in the following claims.

CLAIMS

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- 1. An educational kit which uses the Montessori approach to education, the educational kit comprising

 (a) professionally produced woris, pictures and objects of a quality and a range of subject matter that is not normally attainable by Montessori teachers and teacher training students, and (b) instructions for use, whereby the educational kit is adapted to be used in homes and schools without the need to produce hand made material.
- An educational kit according to claim 1 and
 including sandpaper cards for use in the initial stages of teaching a child to read and write.
 - 3. An educational kit according to claim 1 or claim 2 and including an alphabet which is in the same form of print and which is composed of individual letters which can be taken by a child and used in word building.
 - 4. An educational kit according to any one of the preceding claims and including a plurality of pink boxes.
 - 5. An educational kit according to claim 4 in

which there are five pink boxes, the first box containing words and objects, and the second box containing words and pictures, the third box containing words and objects, the fourth box containing words and pictures, and the fifth box containing a plurality of pieces of inset folded paper, the words being three letter phonetics.

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- 6. An educational kit according to claim 4 or claim 5 and including two pink cards, each card having a pink envelope on its rear surface, and each card having a plurality of pictures mounted on its front surface, and the words for the pictures being provided in the envelopes.
- 7. An educational kit according to any one of the preceding claims and including a pink sentence which contains a plurality of sentence cards, a plurality of objects and a plurality of pictures.
- 8. An educational kit according to any one of claims 4 to 7 and including a plurality of pieces of apparatus which are coloured blue and which are similar to the pieces of the pink apparatus, with the proviso that the blue words are composed of four or longer letter phonetics.

9. An educational kit according to any one of the preceding claims and including a plurality of green boxes, each box being labelled in its top right hand corner with a particular digraph which is in a different colour to the remainder of the word in which the digraph appears.

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- 10. An educational kit according to any one of the preceding claims and including history timeline apparatus.
- 10. An educational kit according to any one of the preceding claims and including geographical apparatus including sculptured landforms and pictures showing examples of the landforms.
 - 12. An educational kit substantially as herein described with reference to the accompanying drawings.